

The opinion in support of the decision being entered today is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* NICHOLAS PAUL KELLY, LEE CODEL LAWSON  
TARBOTTON, and KEVIN ANDREW GUDGION

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Appeal 2007-2020  
Application 10/028,906  
Technology Center 2100

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Decided: September 27, 2007

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Before HOWARD B. BLANKENSHIP, ALLEN R. MACDONALD, and MARC S. HOFF, *Administrative Patent Judges*.

BLANKENSHIP, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal involves claims 1-39, the only claims pending in this application. We have jurisdiction under 35 U.S.C. §§ 6(b), 134(a).

## INTRODUCTION

The claims relate to techniques for controlling access to suspicious files; i.e., access to potential malware such as viruses and worms.  
(Specification 1:3-7.) Claim 1 is illustrative:

1. A computer program product for operating a computer to review files for potential malware, comprising:

logging code operable to maintain a statistical log having an entry for each file sent to the computer for review, each entry being arranged to store a count value indicating the number of times that the file has been sent to the computer for review and a value of one or more predetermined attributes relating to the file;

weighting table code operable to maintain a weighting table identifying, for each value of said one or more predetermined attributes, a weighting indicating the likelihood that a file having that value of said one or more predetermined attributes will be malware;

statistical log interface code operable, upon receipt of a file, to determine with reference to the statistical log the count value relating to that file;

action determination code operable, if the count value determined by the statistical log interface code exceeds a predetermined threshold, to reference the weighting table to determine the weighting to be associated with the file, based on the value of said one or more predetermined attributes associated with that file in the statistical log; and

action performing code operable to perform predetermined actions in relation to the file dependent on the weighting determined by said action determination code.

The Examiner relies on the following prior art references to show unpatentability:

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Templeton	US 6,401,210 B1	Jun. 4, 2000 (filed Sep. 23, 1998)
Chess	US 6,711,583 B2	Mar. 23, 2004 (filed Sep. 30, 1998)
Smithson	US 6,886,099 B1	Apr. 26, 2005 (filed Sep. 12, 2000)

The rejections as presented by the Examiner are as follows:

1. Claims 1-13 and 27-39 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.
2. Claims 1, 2, 7-12, 14, 15, 20-25, 27, 28, and 33-38 are rejected under 35 U.S.C. § 103(a) as unpatentable over Chess and Smithson.
3. Claims 3-6, 13, 16-19, 26,<sup>1</sup> 29-32, and 39 are rejected under 35 U.S.C. § 103(a) as unpatentable over Chess, Smithson, and Templeton.

## OPINION

### *§ 101 Rejection*

The Examiner rejected claims 1-13 under 35 U.S.C. § 101 in the Final Rejection, and, in a new ground of rejection in the Answer, additionally rejected claims 27-39. According to the Examiner, all the rejected claims represent computer listings *per se*. “In contrast, a claimed computer-readable medium encoded with a computer program defines structural and functional interrelationships between the computer program and the medium which permit the computer program’s functionality to be realized, and is thus statutory.” (Answer 3.)

Appellants’ response is that in claims 1-13 Appellants claim a computer program product for operating a computer to review files for

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<sup>1</sup> (See Answer 10.)

potential malware, “clearly a functional set of acts being performed.” (Reply Br. 2.) With respect to claims 27-39, Appellants submit that they clearly claim a data processing apparatus for reviewing files for potential malware comprising “logging logic...weighting table logic...[etc.].” (*Id.* 3.)

In a § 101 analysis, the critical question must be answered: “What did the applicant invent?” *Arrhythmia Research Technology, Inc. v. Corazonix Corp.*, 958 F.2d 1053, 1059, 22 USPQ2d 1033, 1038 (Fed. Cir. 1992) (quoting *In re Grams*, 888 F.2d 835, 839, 12 USPQ2d 1824, 1827 (Fed. Cir. 1989)). A § 101 inquiry is directed to the determination of whether the claimed subject matter as a whole is a disembodied mathematical concept representing nothing more than a “law of nature” or an “abstract idea,” or if the mathematical concept has been reduced to some practical application rendering it “useful.” *AT&T Corp. v. Excel Communications Inc.*, 172 F.3d 1352, 1357, 50 USPQ2d 1447, 1451 (Fed. Cir. 1999) (citing *In re Alappat*, 33 F.3d 1526, 1544, 31 USPQ2d 1545, 1557 (Fed. Cir. 1994) (en banc)).

Appellants’ response to the rejection does not demonstrate the Examiner’s position to be in error. With respect to claims 1 through 13, it is unclear to what “functional set of acts” Appellants may be referring. Representative claim 1 recites a “computer program product.” Appellants have not shown that a computer program listing *per se* cannot be considered a computer program product.

Claim 1 goes on to recite that the “product” is “for operating a computer to review files for potential malware.” A computer program listing *per se* can be considered to be “for operating a computer” to perform specified functions, because *after* the program is compiled and reduced to machine-executable form the computer may perform the functions. Further,

instant claim 1 recites five instances of “code,” each “operable” to perform specified functions. “Code” may be considered as comprising a computer program listing *per se*, “operable” in the sense that, once compiled and reduced to machine-executable form, the computer may be caused to function as specified by the code. “Code” may also be considered as referring to machine-executable instructions that are resident on a computer.

However, in the present proceedings we cannot discard the broadest reasonable interpretation of the claims, consistent with the Specification, in favor of an interpretation that may limit the claims in such a way to require statutory subject matter. “An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process.” *In re Zletz*, 893 F.2d 319, 322, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989).

Indeed, the Examiner’s rejection appears to include an indication of how the claims may be amended to render the claimed matter statutory, consistent with the *Manual of Patent Examining Procedure (MPEP)* § 2106(IV)(B), p. 2100-10 (8th Ed., Rev. 5, Aug. 2006). The Examiner’s position is, further, consistent with current Office practice. *See MPEP* § 2106.01(I), p. 2100-18 (8th Ed., Rev. 5, Aug. 2006), which spells out how one may avoid having claims interpreted as directed to a computer listing *per se*: “[A] claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory.”

Claims 27-39 purport an “apparatus,” but (representative) claim 27 does not require any kind of physical structure in the body of the claim. Similar to claim 1 and its recitation of “code,” claim 27 recites “logic” which, according to the context, may refer to an abstraction, a computer listing *per se*, hardware implementation of logic, or hardware/software implementation of logic. Nothing in the claim requires an interpretation of anything more concrete than a computer listing *per se*, however. Merely reciting that the claim is directed to an “apparatus” is not sufficient to place the invention into a § 101 statutory class; e.g., machine, manufacture, or composition of matter.

We are thus not persuaded that any claim has been rejected in error. We sustain the rejection of claims 1-13 and 27-39 under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

#### *Prior Art Rejections*

For the purpose of our review of the rejections over the prior art, we will give effect to all the claim terms, consistent with the Examiner’s position in the Answer (i.e., as if structural and functional interrelationships are realized in claims 1-13 and 27-39).

Instant claim 1 recites, *inter alia*, logging code operable to maintain a statistical log having an entry for each file sent to the computer for review, each entry being arranged to store a count value indicating the number of times that the computer has been sent to the computer for review. The rejection refers (Answer 4-5, 12) to column 4, line 62 through column 5, line 5 of Chess for the teaching.

Chess teaches, in the indicated section, that an anti-virus program may begin a scan of the system in response to user input or periodically, in accordance with a timer. Alternatively, the scan can be initiated in response to a document changing event such as each occurrence of the document changing, the “Nth” occurrence of a document changing, or a certain number of documents having changed.

We agree with Appellants (Appeal Br. 16; Reply Br. 4) that the reference does not support the Examiner’s finding with respect to Chess and maintenance of a statistical log. In particular, we do not find any disclosure or suggestion in the indicated section of Chess of maintaining in a database the “Nth” occurrence of the document being scanned (Answer 5), or of a number of times the document has been reviewed for changes (*Id.* 12). Chess describes what is maintained in a database with respect to each document resident in the system (e.g., col. 4, ll. 22-61; Fig. 2, ref. num. 203, 204), which does not appear to include either of the values that the Examiner seems to imply in the paragraph bridging columns 4 and 5 of Chess.

Even assuming, *arguendo*, that the Examiner’s reading is correct, maintaining in a database the “Nth” occurrence of a document being scanned, or the number of times a document has been reviewed for changes, does not teach or suggest maintaining a statistical log having an entry for each file sent to the computer for review, each entry being arranged to store a count value indicating the number of times that the file has been sent to the computer for review.

Nor has the Examiner offered any line of reasoning to suggest that the claimed subject matter would have been obvious to the artisan. In order to determine whether there was an apparent reason to combine known elements

in the fashion claimed, the analysis should be made explicit. *KSR Int'l v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007) (citing *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”).

Because the other independent claims (14, 27) contain substantially similar language to that of claim 1 for which the rejection fails, and neither Smithson nor Templeton remedy the deficiencies of the rejection, we do not sustain the rejection of any claim under 35 U.S.C § 103(a).

## CONCLUSION

The rejection of claims 1-13 and 27-39 under 35 U.S.C. § 101 as being directed to non-statutory subject matter is affirmed. The rejection of claims 1, 2, 7-12, 14, 15, 20-25, 27, 28, and 33-38 under 35 U.S.C. § 103(a) as unpatentable over Chess and Smithson is reversed. The rejection of claims 3-6, 13, 16-19, 26, 29-32, and 39 under 35 U.S.C § 103(a) as unpatentable over Chess, Smithson, and Templeton is reversed.

The Examiner’s decision is thus affirmed-in-part.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

**AFFIRMED-IN-PART**

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